

What is Claimed is:

1. A method of predicting whether a specified event will occur for an entity after a specified trigger event has occurred for that entity, the method comprising the steps of:

- (i) accessing data about other entities for which the specified event has occurred in the past after the specified trigger event;
- (ii) accessing data about the entity for which the prediction is required;
- (iii) creating a Bayesian statistical model on the basis of at least the accessed data; and
- (iv) using the model to generate the prediction, wherein the data comprises a plurality of attributes associated with each entity and wherein creating the model comprises partitioning the attributes into a plurality of partitions.

2. A method as claimed in claim 1, further comprising the step of predicting when the specified event will occur.

3. A method as claimed in claim 1, wherein the entities are customers.

4. A method as claimed in claim 1, wherein the specified event is leaving a bank.

5. A method as claimed in claim 1, wherein the specified trigger event is closing a loan.

6. A method as claimed in claim 1, wherein the model comprises a survival analysis type model.

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7. A method as claimed in claim 6, wherein the survival analysis type model is arranged to take into account the assumption that the specified event will not occur for some of the entities.

8. A method as claimed in claim 1, wherein the step of creating the model further comprises calculating the marginal likelihood of latent risks within each partition.

9. A method as claimed in claim 1, wherein the step of creating the model further comprises mixing over all possible partitions in a Bayesian framework.

10. A method as claimed in claim 1, wherein the step of creating the model further comprises choosing an optimal set of partitions which best predicts latent risks within each partition.

11. A method as claimed in claim 9, wherein the step of mixing over all possible partitions comprises using a sampling method.

12. A method as claimed in claim 1, wherein the step of creating the model comprises fitting a Weibull distribution to the data within each partition.

13. A method as claimed in claim 12, wherein the step of creating the model comprises calculating the marginal likelihood of the data.

14. A method as claimed in claim 13, wherein the step of creating the model further comprises mixing over all possible partitions in a Bayesian framework.

15. A method as claimed in claim 13, wherein the step of creating the model further comprises choosing an optimal set of partitions which best predicts the data.

16. A method as claimed in claim 14, wherein the step of mixing over all possible partitions comprises using a sampling method.

17. A computer system for predicting whether a specified event will occur for an entity after a specified trigger event has occurred for that entity, the computer system comprising:

an input for accessing data about other entities for which the specified event has occurred in the past after the specified trigger event, and accessing data about the entity for which the prediction is required, wherein the data comprises a plurality of attributes associated with each entity;

a processor for creating a Bayesian statistical model on the basis of at least the accessed data by partitioning the attributes into a plurality of partitions, and using the model to generate the prediction.

18. A computer program for controlling a computer system to predict whether a specified event will occur for an entity after a specified trigger event has occurred for that entity, the computer program being arranged to control the computer system such that:

(i) data is accessed about other entities for which the specified event has occurred in the past after the specified trigger event;

(ii) data is accessed about the entity for which the prediction is required, wherein the data comprises a plurality of attributes associated with each entity;

(iii) a Bayesian statistical model is created on the basis of at least the accessed data by partitioning the attributes into a plurality of partitions; and

(iv) the model is used to generate the prediction.

19. A computer program as claimed in claim 18, wherein the computer program is stored on a computer readable medium.

20. A program storage medium readable by a computer system having a memory, the medium tangibly embodying one or more programs of instructions executable by the computer system to perform method steps for controlling the computer system to predict whether a specified event will occur for an entity after a specified trigger event has occurred for that entity, the method comprising the steps of:

- (i) accessing data about other entities for which the specified event has occurred in the past after the specified trigger event;
- (ii) accessing data about the entity for which the prediction is required, wherein the data comprises a plurality of attributes associated with each entity;
- (iii) creating a Bayesian statistical model on the basis of at least the accessed data by partitioning the attributes into a plurality of partitions; and
- (iv) using the model to generate the prediction.